

Application No: 10/002,521

Amendment and Response dated February 15, 2007

Reply to Office Action of November 15, 2006

Docket No: 760-35 CIP/RCE IV

Page 2

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (previously presented) A medical device comprising:  
an implantable tubular extrudate, said tubular extrudate being extruded in the form of a tube, comprising an interpenetrating polymer network comprising a non-expanded PTFE matrix having no node and fibril structure, said matrix having distributed therein discrete domains of a solid extractable polymeric material, wherein upon exposure to sufficient dissolving medium or degradation temperature, said extractable polymeric material is extracted from said matrix to create pores in said tubular extrudate which upon implantation permit tissue ingrowth.
2. (original) The medical device of claim 1 further including a radially distensible stent positioned axially about said tubular extrudate.
3. (previously presented) A vascular graft comprising:  
an implantable tubular extrudate, said tubular extrudate being extruded in the form of a tube, comprising an interpenetrating polymer network comprising a non-expanded PTFE matrix having no node and fibril structure, said matrix having distributed therein discrete domains of a solid extractable polymeric material, wherein upon exposure to sufficient dissolving medium or degradation temperature, said extractable polymeric material is extracted from said matrix to create pores in said tubular extrudate which upon implantation permit tissue ingrowth.
4. (withdrawn) A method of forming a porous PTFE product comprising:  
providing a mixture of PTFE and an extractable polymer material;  
extruding said mixture to form an extrudate comprising a PTFE matrix with discrete domains of said extractable polymer material;  
subjecting said extrudate to a solvent for said polymer material, a temperature sufficient

Application No: 10/002,521

Amendment and Response dated February 15, 2007

Reply to Office Action of November 15, 2006

Docket No: 760-35 CIP/RCE IV

Page 3

to degrade said polymer material or a combination thereof, whereby at least a portion of said polymer material is extracted, thereby forming pores in said extrudate.

5-10. (canceled)

11. (withdrawn) A method of making an endoprosthesis device comprising the steps of:
  - providing an elongate radially expandable tubular stent;
  - providing a porous polytetrafluoroethylene by extracting siloxane from an interpenetrating network of siloxane and polytetrafluoroethylene;
  - forming a stent cover from said porous polytetrafluoroethylene; and
  - applying said stent cover to said interior surface, said exterior surface, or both of said stent wherein said stent cover extends along the longitudinal stent axis.
12. (withdrawn) The method of Claim 7 wherein said stent cover is applied to said interior surface and to said exterior surface of said stent.
13. (withdrawn) The method of Claim 7 wherein said stent cover is fixed to said stent using an adhesive.
14. (withdrawn) The method of Claim 9 wherein said adhesive is selected from the group consisting of polyurethanes, epoxies, cyanoacrylates, polyamides, polyimides, and silicones.
15. (withdrawn ) The method of Claim 7 wherein said stent cover is fixed to said stent by a welding process, said welding process comprising heating the polytetrafluoroethylene stent cover to a temperature that is greater than the sintering temperature of the polytetrafluoroethylene.
16. (withdrawn) A method for producing a porous polytetrafluoroethylene tube useful in

medical devices comprising the steps of: providing an interpenetrating network of siloxane and polytetrafluoroethylene; and removing said siloxane from said interpenetrating network leaving a porous polytetrafluoroethylene structure.

17 – 20. (canceled)

21. (previously presented) The medical device according to Claim 1, wherein said extractable polymeric material comprises silicone.

22. (previously presented) A medical device comprising:

a tubular extrudate, said tubular extrudate being extruded in the form of a tube, comprising an interpenetrating polymer network comprising a non-expanded PTFE matrix having no node and fibril structure, said matrix having distributed therein discrete domains of a solid extractable polymeric material, said extractable polymeric material being particulate and having a particle size of about 5 to 100 microns,

wherein upon exposure to sufficient dissolving medium or degradation temperature, said extractable polymeric material is extracted from said matrix to create pores corresponding to said particle size in said tubular extrudate which upon implantation permit tissue ingrowth.

23. (withdrawn) An implantable, non-expanded, porous PTFE extrudate comprising:

a tubular extrudate comprising non-expanded PTFE having no node and fibril structure; and

a plurality of pores distributed throughout said non-expanded PTFE, said pores having a shape defined by an extracted polymeric material, said polymeric material being in a form selected from the group consisting of a gel, liquid and flowable material.

24. (previously presented) A PTFE extrudate consisting essentially of:

a non-expanded PTFE resin having no node and fibril structure; and

a solid particulate polymeric component which is incompatible with said non-expanded

Application No: 10/002,521

Amendment and Response dated February 15, 2007

Reply to Office Action of November 15, 2006

Docket No: 760-35 CIP/RCE IV

Page 5

PTFE resin,

wherein discrete domains of said polymeric component are distributed throughout said non-expanded PTFE resin and are extractable therefrom to create pores in said PTFE resin which upon implantation permit tissue ingrowth.

25-26. (canceled)

27. (original) The medical device according to Claim 24, wherein said solid extractable polymeric material comprises silicone.